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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,567	10/23/2003	Tadashi Ishida	029430-554	5977
21839	7590	08/18/2005	EXAMINER	
BUCHANAN INGERSOLL PC (INCLUDING BURNS, DOANE, SWECKER & MATHIS) POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			CAMERON, ERMA C	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/690,567

Applicant(s)

ISHIDA ET AL.

Examiner

Erma Cameron

Art Unit

1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-16 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 21-23 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a) Claims 21 and 22: it is not clear what the antecedent basis for “its” is.

b) Claim 23, line 3: there is no antecedent basis for the recording surface.

c) Claim 26: it should be indicated that the amino-group containing (meth)acrylate monomer is (B).

d) Claim 26: it is not clear what halo represents, as three halide species follows represents, as well as 3 other molecules. In addition the halo species should be put into proper Markush terminology – selected from the group consisting of. In addition, the use of two “and’s” – in the last line and the fourth last line makes the Markush group for (B) confusing.

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3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 14-16 and 19-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The following is new matter:

a) Claim 14: void-forming component consisting essentially of...

Claim 1 as originally filed and 7:21/22 were worded consisting substantially of...

The examiner considers essentially and substantially of to be different in scope.

b) Claim 14: said cationic particulate being a copolymer having a non-crosslinked structure is new matter. The specification and claims as originally filed are silent as to crosslinking.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14, 16 and 23-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by EP 802245.

‘245 teaches coating an ink-jet receiving layer on a base layer. The ink layer composition comprises pore-containing (i.e. void-containing) cationic fine particles of a crosslinked resin and a binder. The cationic fine particles are polymerized from (meth)acrylic esters having an amino group, (meth)acrylamides having an amino group, or their quarternized counterparts. The composition is applied by cast coating or a bar coater and then supercalendared (i.e. mirror roll) (3:31-53, 13:36-48, 16:11-32, see Examples). The ink layer composition may contain white inorganic pigments, but this is not required. ‘245 does not describe the resin as thermoplastic, but because it is formed from the same materials as applicant’s claimed organic component, the resin particles are inherently thermoplastic. The species that make up the resin are among those used by applicant – such as N-dimethylaminoethyl methacrylate (3:37-38).

The applicant has argued in the 8/5/2005 amendment that ‘245 discloses particles of a crosslinked resin, whereas their invention does not have a crosslinked resin. However, the specification and claims of the instant application as originally filed are silent as to whether or nor the resin is crosslinked.

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The applicant has also argued that '245 is silent as to gloss, light resistance and yellowing. However, '245 does mention gloss and yellowing (2:25-39 and elsewhere) as two parameters that need to be controlled in the production of printing media. In addition, the applicant has not claimed qualities of gloss, light resistance or yellowing in the claims.

7. Claims 14-16 and 23-26 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP09-300810.

See translation of JP 09-300810. '810 teaches an ink jet recording paper made by applying a (meth)acrylic polymer with a cationic alkylamino group [0015], formed from an alkylamino such as dimethylamine ethylacrylate [0011] and another monomer such as methyl acrylate [0013], and having a Tg of 40 C+, preferably 50-80 C [0017], to a paper or synthetic base [0025] by cast coating, followed by a heated mirror roll (see "Problem to be solved"). The drying finishing of the cast coated layer should be done at a T under the Tg of the resin [0018], thus meeting claim 15. Inorganic particles are not required in this layer. The ink jet paper has outstanding gloss ("Subject of the invention", [0010]), and good ink fixing and water resistance [0015].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 15 and 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 802245.

‘245 is applied here for the reasons given above.

‘245 does not disclose the Tg or Mw of the resin particles, but it would have been obvious to one of ordinary skill in the art to have optimized these known parameters through no more than routine experimentation depending on the properties of the ink layer that are desired.

‘245 does not disclose that the calendaring process is at a lower T than the Tg of the resin particles, but it would have been obvious to one of ordinary skill in the art to have not calendared the layer above the Tg of the particles, so as to not alter the physical state of the particles.

‘245 discloses that the water absorption capacity is 10-25 times, but does not disclose the absorption in the same terms as applicant. Because the resin particles of ‘245 are very similar in composition to the particles claimed by applicant, it would appear that the absorption capacities would be similar or overlapping.

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10. Claims 19-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 09-300810.

'810 is applied here for the reasons given above.

'810 teaches that the Tg of the polymer is 50-80 C [0017], which overlaps with applicant's claimed range.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness. See *In re Malagari* 182 USPQ 549.

'810 does not disclose the Mw of the polymer, but it would have been obvious to one of ordinary skill in the art to have optimized a known parameter like Mw through no more than routine experimentation depending on the properties of the ink layer that are desired.

'810 does not disclose the liquid absorption of the ink jet paper, but because the polymer of '810 is very similar in composition to the polymer claimed by applicant, it would appear that the absorption capacities would be similar or overlapping.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erma Cameron whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


ERMA CAMERON
PRIMARY EXAMINER

Erma Cameron
Primary Examiner
Art Unit 1762

August 17, 2005